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Color chart of indicators; reprinted from



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Explanation

The colors shown upon the chart were reproduced from tubes 16 mm. internal diameter containing 10 cc. standard buffer solution. The quantities of indicator solution added in each case were as follows:

Thymol blue, acid range (T.B. acid range).....	1 cc. 0.04
per cent solution	
Brom phenol blue (B.P.B.).....	0.5 cc. 0.04
per cent solution	
Methyl red (M.R.).....	0.3 cc. 0.02
per cent solution	
Brom cresol purple (B.C.P.).....	0.5 cc. 0.04
per cent solution	
Brom thymol blue (B.T.B.).....	0.5 cc. 0.04
per cent solution	
Phenol red (P.R.).....	0.5 cc. 0.02
per cent solution	
Cresol red (C.R.).....	0.5 cc. 0.02
per cent solution	
Thymol blue (T.B.).....	0.5 cc. 0.04
per cent solution	

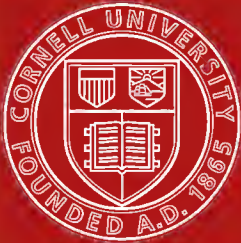
It must be remembered that the light adsorptions in the case of the standard solutions and in the case of the printed colors are quantitatively very different in the two cases. Therefore, the user of the chart will have to use discretion and should consider the printed colors to be only rough standards. A more detailed discussion of this chart is given in the book from which the chart is reprinted—"The Determination of Hydrogen Ions" by W. Mansfield Clark.

Price, net, postpaid

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Five copies of the Chart.....	.75 a copy
Ten copies of the Chart.....	.65 a copy
Fifteen copies of the Chart.....	.60 a copy
Twenty-five copies of the Chart, or over.....	.50 a copy

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T. B. (cc)	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8
B. P. B.	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6
M. R.	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0
B.C. P.	5.2	5.6	5.8	6.0	6.2	6.4	6.6	6.8	7.0

B.T. B.

P. R.

C. R

T. B.



FIG. 8. CHART SHOWING THE COLORS OF CLARK AND LUBS' INDICATORS IN SOLUTIONS OF KNOWN pH

LaMotte



Standards

FOR USE IN THE

Colorimetric Determination of Hydrogen-Ion Concentration

A—STANDARDIZED INDICATOR DYES: Supplied in both dry and solution form

<i>Common Name</i>	<i>Color change</i>	<i>pH range</i>
THYMOL BLUE (acid range)	Red-Yellow	1.2-2.8
BROMPHENOL BLUE	Yellow-Blue	3.0-4.6
METHYL RED	Red-Yellow	4.4-6.0
BROMCRESOL PURPLE	Yellow-Purple	5.2-6.8
BROMTHYMOL BLUE	Yellow-Blue	6.0-7.6
PHENOL RED	Yellow-Red	6.8-8.4
CRESOL RED	Yellow-Red	7.2-8.8
THYMOL BLUE (alkaline range)	Yellow-Blue	8.0-9.6
CRESOL PHTHALEIN	Colorless Red	8.2-9.6
PHENOL PHTHALEIN	Colorless Red	8.4-9.2

B—STANDARDIZED BUFFER SOLUTIONS (M/5)

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The Determination of Hydrogen Ions

by

W. Mansfield Clark, Ph.D.

First Edition - - - - *September, 1920*

Reprinted - - - - *September, 1921*

SECOND EDITION - - *September, 1922*

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